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TANAIDACEA (CRUSTACEA: PERACARIDA) OF THE GULF OF MEXICO. III. ON THE OCCURRENCE OF *TELEOTANAIS GERLACHI* LANG, 1956 (NOTOTANAIDAE) IN THE EASTERN GULF

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ABSTRACT *Teleotanais gerlachi* Lang, 1956, a euryhaline member of the family Nototanaidae, known from Brazil and El Salvador, is reported from the eastern Gulf of Mexico (west coast of Florida) and the west coast of Africa (Nigeria). The species is diagnosed and illustrated. Differences between *Teleotanais* and the superficially similar genus *Paratanais* (Paratanaidae) are briefly compared and discussed.

Knowledge of the distribution and systematics of members of the family Nototanaidae is very fragmentary. Of the genera so far established, *Nototanais* Richardson, 1906, seems to be restricted to the Antarctic-Subantarctic region and another, *Tanaissus* Norman and Scott, 1906, inhabits the shallow waters of the North Atlantic as well as the North Pacific. The remaining genera are monotypic. *Androtanais* Sieg, 1973; *Metatanais* Shiino, 1952; and *Protanaissus* Sieg, 1983, are known only from their respective type-localities. *Teleotanais* Lang, 1956, has been reported previously only from the coasts of El Salvador and Brazil. During our recent studies on the tanaidacean fauna of the Gulf of Mexico we discovered specimens of *Teleotanais gerlachi* Lang, 1956, from a sample collected by D. Bishop from the west coast of Florida. We also had access to specimens of *T. gerlachi* collected from the west coast of Africa (Nigeria) and this record is also included here.

Teleotanais gerlachi Lang, 1956
(Figures 1–3)

Synonymies: see Sieg, 1983: 418–419.

Material Examined – 11 ♀♀ (10 ♀♀ in coll. Heard, 1 ♀ in coll. Sieg, dissected) from Crystal River, Florida (28°55′N, 82°40′W); Highway 40 off US Highway 19, 4 miles west of Yankeetown, from oyster rock [together with 4 specimens of *Hargeria rapax* (Hargen 1918); D. Bishop, collector. Approximately 200 specimens (neuters, females) from Elechi Creek near Port Hartcourt, Nigeria (04°47.3′N, 06°58.6′E); high intertidal, on *Avicennia* pneumatophores, among green algae and *Bostrychia*, mesohaline; co-occurring with *Sinelobus standfordi* (Richardson, 1901); C. B. Powell, collector].

Diagnosis – Antenna I 4-jointed, first joint at most twice as long as second, fourth joint relatively short with 2 aesthetascs at tip (Figure 1); antenna II 6-jointed, third joint elongate (Figure 1); maxilla 1 with 11 spines (Figure 2); basis of maxilliped totally fused (Figure 1); propodus of pereopods with 1–3 distal setae, 2 long sternal setae and 1 short tergal seta; basis of pereopods 4–6 thickened (Figure 3); endopodite of pleopods narrowing at junction with basis, without a lateral marginal seta, separated from others by a gap (Figure 1); uropods biramous, endopodite and exopodite 2-jointed, exopodite longer than first joint of endopodite (Figure 1).

Remarks – *Teleotanais* superficially resembles *Paratanais* Dana, 1852, because both genera have a 4-segmented antenna I and uropods with 2-jointed exopodite and endopodite. In *Paratanais* the last joint of antenna I is elongate and longer than the second and third joint combined, while in *Teleotanais* the last joint is distinctly shorter. Another difference is found in antenna II which in *Paratanais* has a short, thick third joint with strong outer spine, while in *Teleotanais* the third joint is elongate (as long or longer than the fourth joint) and lacks an outer spine. Maxilla 1 bears in *Teleotanais* eleven and in *Paratanais* nine terminal spines. The maxillipeds of the two genera are distinctly different. Since *Paratanais* belongs to the Family Paratanaidae the basis of the maxilliped is unfused; whereas it is completely fused in *Teleotanais* (Nototanaidae). Additionally in *Paratanais* the endite of the maxilliped is broad and expanded laterally, fused with the basis (Sieg 1981: 1274 Figure 2). In *Teleotanais* the endite is small and of normal shape with a relatively long seta at the outer margin of the endite, which we believe to be a characteristic of this genus. The pleopods of *Teleotanais* and *Paratanais* are distinctly different. In *Teleotanais* specialized setae on the distal part of the exopodite and the separate seta inserted proximally at the outer margin of the exopodite are missing; these setae are present in *Paratanais* and all other genera in the Paratanaidae. The chela of the chelipeds of *Teleotanais* and *Paratanais* also have distinctly different shapes.

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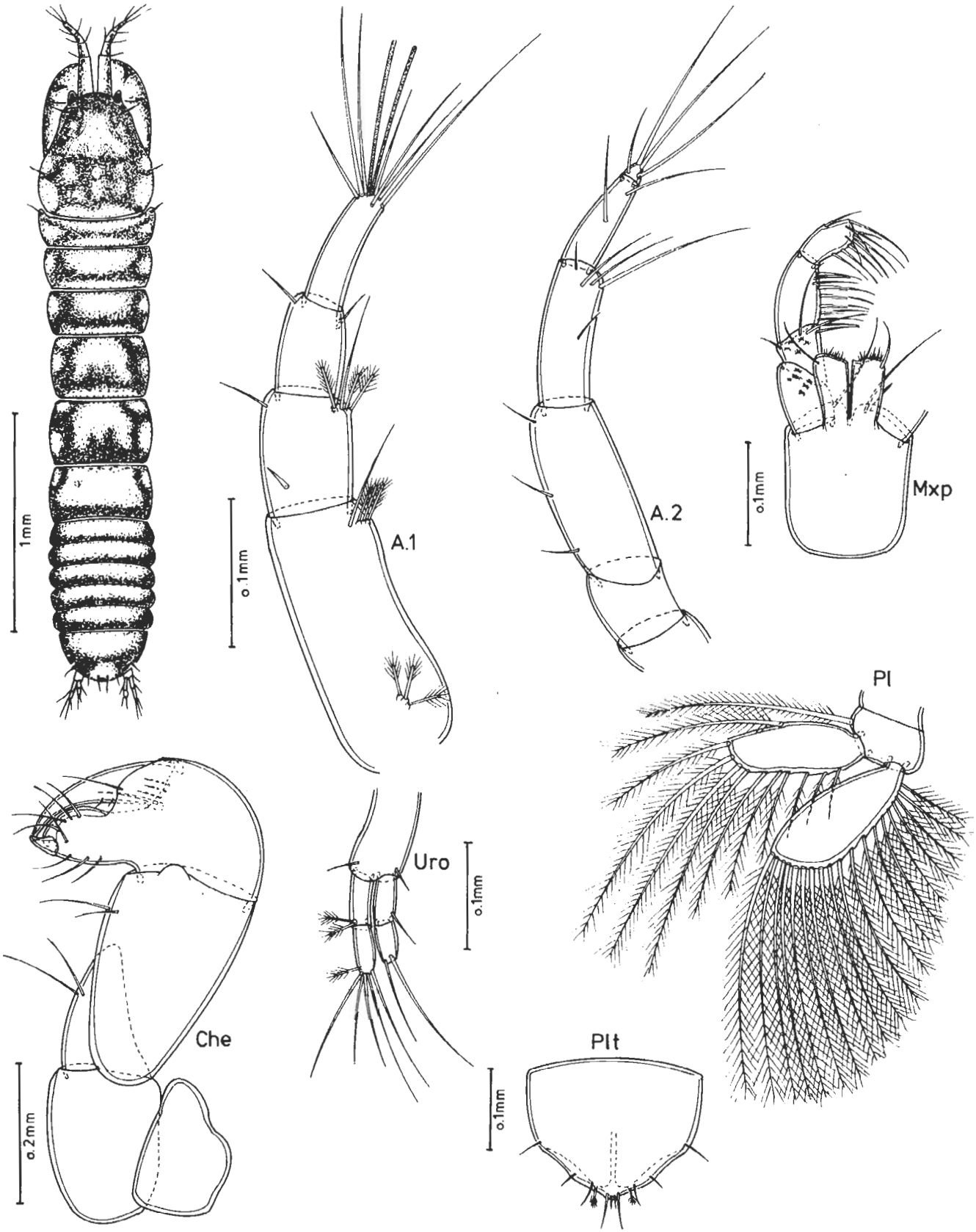

Figure 1. *Teleotanais gerlachi* (dorsal view of female). A. 1 = antenna I; A. 2 = antenna II; Mxp = maxilliped; Che = chela; Uro = uropod; Pl = pleopod; Plt = pleotelson.

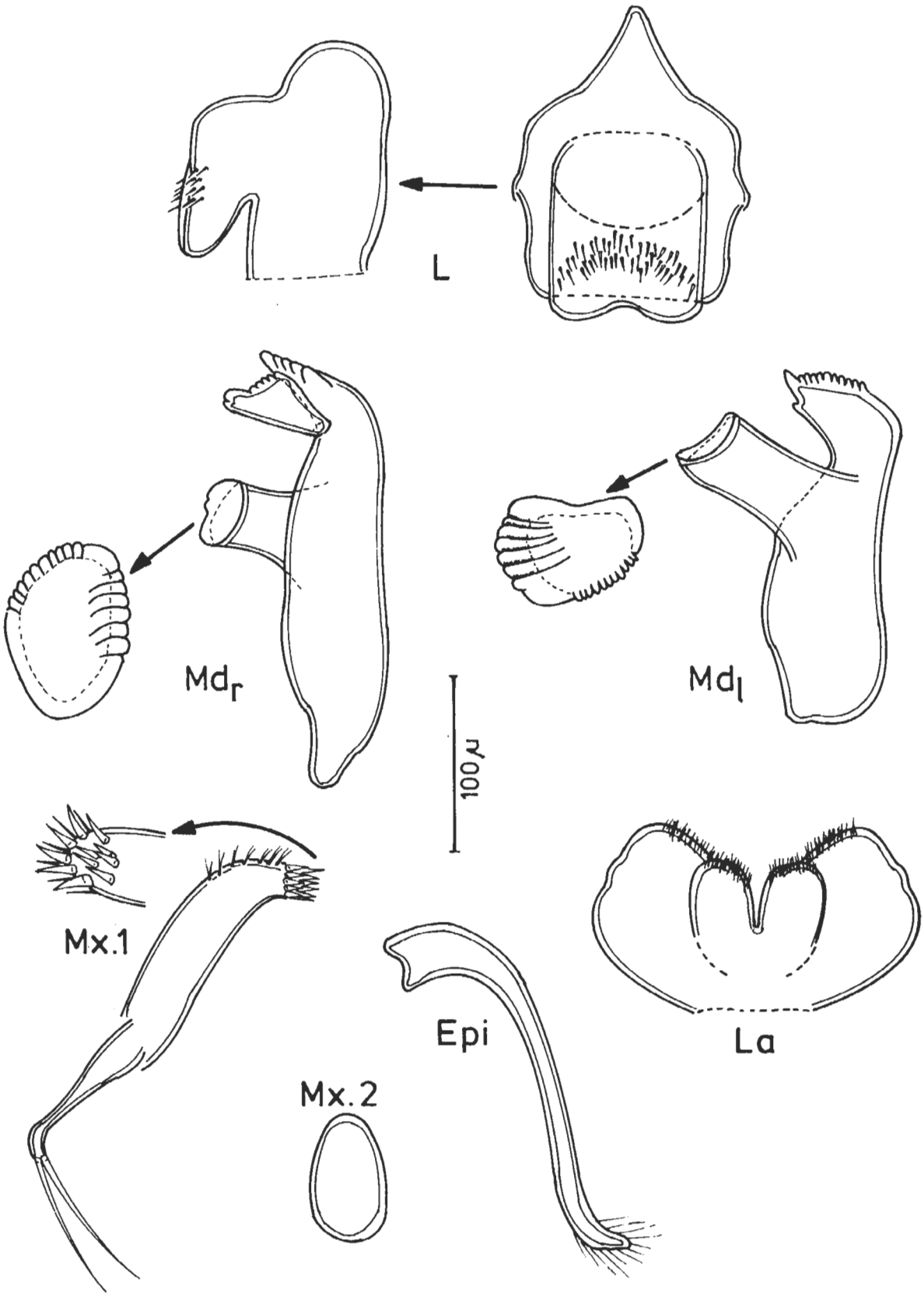

Figure 2. *Teleotanais gerlachi* (female). L = labrum; Mdr = right mandible; Mdl = left mandible; Mx. 1 = maxilla 1; Mx. 2 = maxilla 2; Epi = epignath; La = labium.

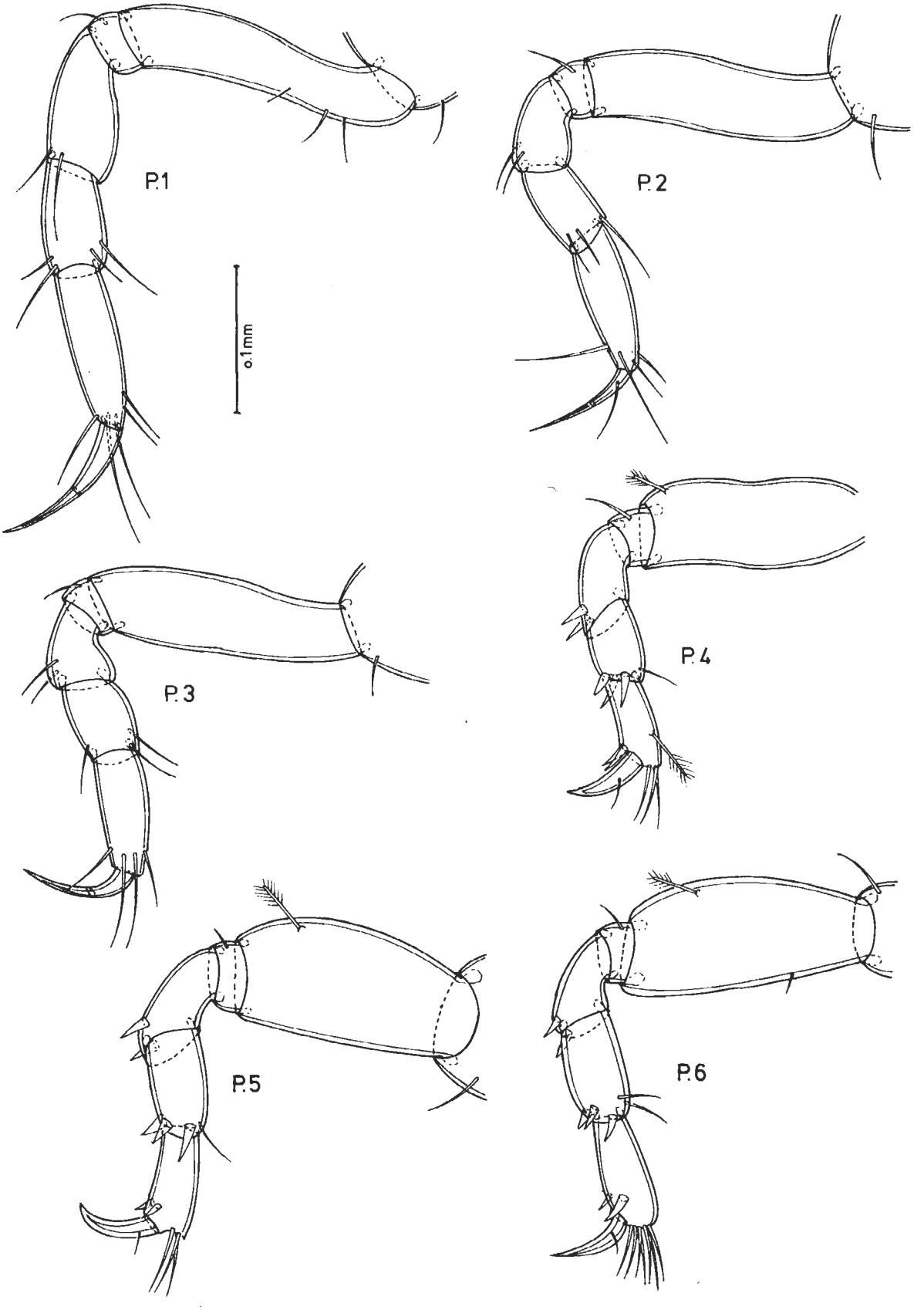

Figure 3. *Teleotanais gerlachi* (female). P 1–6 = pereopods 1–6.

The specimens examined also show a color pattern to distinguish them from *Paratanais.* Populations of *Teleotanais gerlachi* from both Crystal River, Florida, and from Port Hartcourt, Nigeria, have more or less dark brown spots of pigment all over the body (Figure 1), quite similar to those occurring on the tanaid genus *Zeuxo* Templeton, 1840. In comparison *Paratanais* normally has a yellow-white color, which sometimes grades into a more or less dark brown. At present we are not sure if this color pattern in our material of *T. gerlachi* is distinctive for the species, since the type-material, as well as preserved specimens from San Salvador are yellowish-white. The apparent lack of pigment may depend on the kind of fixation or preservation, which may have caused loss or dispersal of pigment over time. But it is also possible that different color patterns may occur among different populations of *T. gerlachi.* Intraspecific variation in pigment pattern is known for members of the family Tanaidae and has been studied extensively in *Parasinelobus* (=*Tanais*) *chevreuxi* (Dollfus, 1898) by Cléret (1966).

Distribution – Presently *T. gerlachi* is known from so few and such widely separated localities that we cannot make any meaningful observations on its distribution pattern. The type-material was recorded by Lang (1956) from the coast of Brazil near Santos and at Cananéia. Additional material was reported by Sieg (1976) from the coast of El Salvador between La Libertad and San Diego and from La Herradura. It should be noted that records of *T. gerlachi* from the Atlantic and Pacific coasts of Panama Canal Zone (Sieg 1976: 83) were the results of misidentifications.

Ecological Remarks – *Teleotanais gerlachi* seems to occur intertidally in euryhaline habitats. All records are from the upper littoral and species occurring there must be able to tolerate a wide range of salinities; therefore, it is not surprising that the specimens collected between La Libertad and San Diego in El Salvador were from a freshwater pool. This species may have a preference for mangrove habitats (e.g., Cananéia) as is known for the euryhaline tanaid *Sinelobus stanfordi.* An indication for this might be seen in the co-existence of both species at Cananéia and Port Hartcourt (see Material Examined, Lang 1956).

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